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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/295,273	04/20/1999	NORIO SUMITOMO	2927-0103P	6992

2292 7590 09/09/2003

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EXAMINER

BLAU, STEPHEN LUTHER

ART UNIT	PAPER NUMBER
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3711

DATE MAILED: 09/09/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/295,273

Applicant(s)

SUMITOMO ET AL.

Examiner

Stephen L. Blau

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/10/03.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings stand objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the first and second inclined fiber reinforced resinous layers being wound by $N + .5$ unintegral turns, so as to apply an anisotropic property to the shaft, where N is an integer more than one in claim 1 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. The examiner would expect the first and second layers to have 2.5, 3.5, 4.5, etc... turns to meet this element of structure since N has to be an integer (whole number) greater than 1 which is then added to .5. Figures 1-2 show a first fiber layer being 3.3 and a second fiber layer being 3.0. Figures 3-4 show a first and second inclined fiber layer being 1.5 making N the integer 1 which the claim requires it to be an integer greater than 1. Figures 6-7 shows a first fiber layer being 3.0 and a second fiber layer being 3.0. No new matter should be entered in the application. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance. ✓

Specification

2. The change to the specification is agreed with and the objection to the disclosure is removed.

Claim Objections

3. The change to claim 1 is agreed with and the objection is removed.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1, and 4-9 stand rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is uncertain how to make the shaft since none of the drawings show the first and second inclined fiber reinforced resinous layers being wound by $N + .5$ unintegral turns, so as to apply an anisotropic property to the shaft, where N is an integer more than one in claim 1. ✓

Declaration

6. The declaration entered 25 October 2001 is convincing with the exception of the drawings which cause confusion. Table 7 on page 11 of the declaration shows the anisotropic characteristics of the invention compared to the non-anisotropic characteristics of the prior art used to reject the claims. However as stated on page 9 of the declaration, the prior art shaft of Patent No. 5,421,573 is KPAT-9 and is shown in figure 1 and the present invention is KPAT-7 and is shown in figure 2. These figures do not match up to what they are suppose to refer to. Figure 1 shows two layers which are wrapped 1.5 turns and an outer layer wrapped 3 turns. It would be expected that figure 1 would show the wrapping of figure 4 of Patent No. 5,421,573 or table 3 of the declaration to be consistent with the comments of page 9 of the declaration showing how wrappings which are not wound unintegral turns produce no twisting as shown in table 7 of the declaration. In addition, it would be expected that figure 2 of the declaration would show the wrappings of either figures 2, 4, 9, or 11 of the present application or table 4 of the declaration to show the wrappings of the invention as stated on page 9 of the declaration. Actually none of the drawings in figure 2 show the same drawings as that of the invention shown in the application and only the 1000mm drawing appears to be consistent with table 4 of the declaration. If figure 1 would show figure 4 of Patent No. 5,421,573 and figure 2 showed the wrappings of claim 1 or one of the figures current presented this declaration would be persuasive. Also figures 1 and 2 of

the declaration are not consistent with tables 1 and 2 of the declaration in terms of the number of sheets placed around the mandrel.

Response to Arguments

7. The argument that layer 3B corresponds to 2.5 turns, layer 3C corresponds to 3.5 turns, and layer 3D corresponds to 4.5 turns is disagreed with. See enclosure (1). In figures 3-4 layer 3B shows 1.5 turns, layer 3C shows 1.5 turns, and layer 3D shows 1.5 turns. The argument that layers 3A-3D in figures 3 and 4 show 4.5 turns is disagreed with. See enclosure (1). In figures 3-4 layers 3A-3D show 6 turns. Even so the claim requires the first inclined layer and the second inclined layer (layer 3A-3B) to have the number of turns of $(N + .5)$ where N is an integer more than 1. Layers 3A and 3B individual or as a whole do not show turns of $(N + .5)$ where N is an integer more than 1. The argument that the replacement page corrects the declaration is disagreed with. Below table 4 the figure 1 is still referred to as KPAT-9 and figure 2 is referred to as KPAT-7. Even so the other problems addressed above still exist.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Blau whose telephone number is (703) 308-2712. The examiner is available Monday through Friday from 8 a.m. to 4:30 p.m.. If the examiner is unavailable you can contact his supervisor Paul Sewell whose telephone number is (703) 308-2126. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0858. (TC 3700 Official Fax 703-872-9302, TC 3700 After Final Fax 703-872-9393, RightFax 703-746-3203)

Slb/ 06 September 2003


STEPHEN BLAU
PRIMARY EXAMINER